

G. L. POH.
AUTOMATIC FEEDER.
APPLICATION FILED AUG. 3, 1908.

928,400.

Patented July 20, 1909.

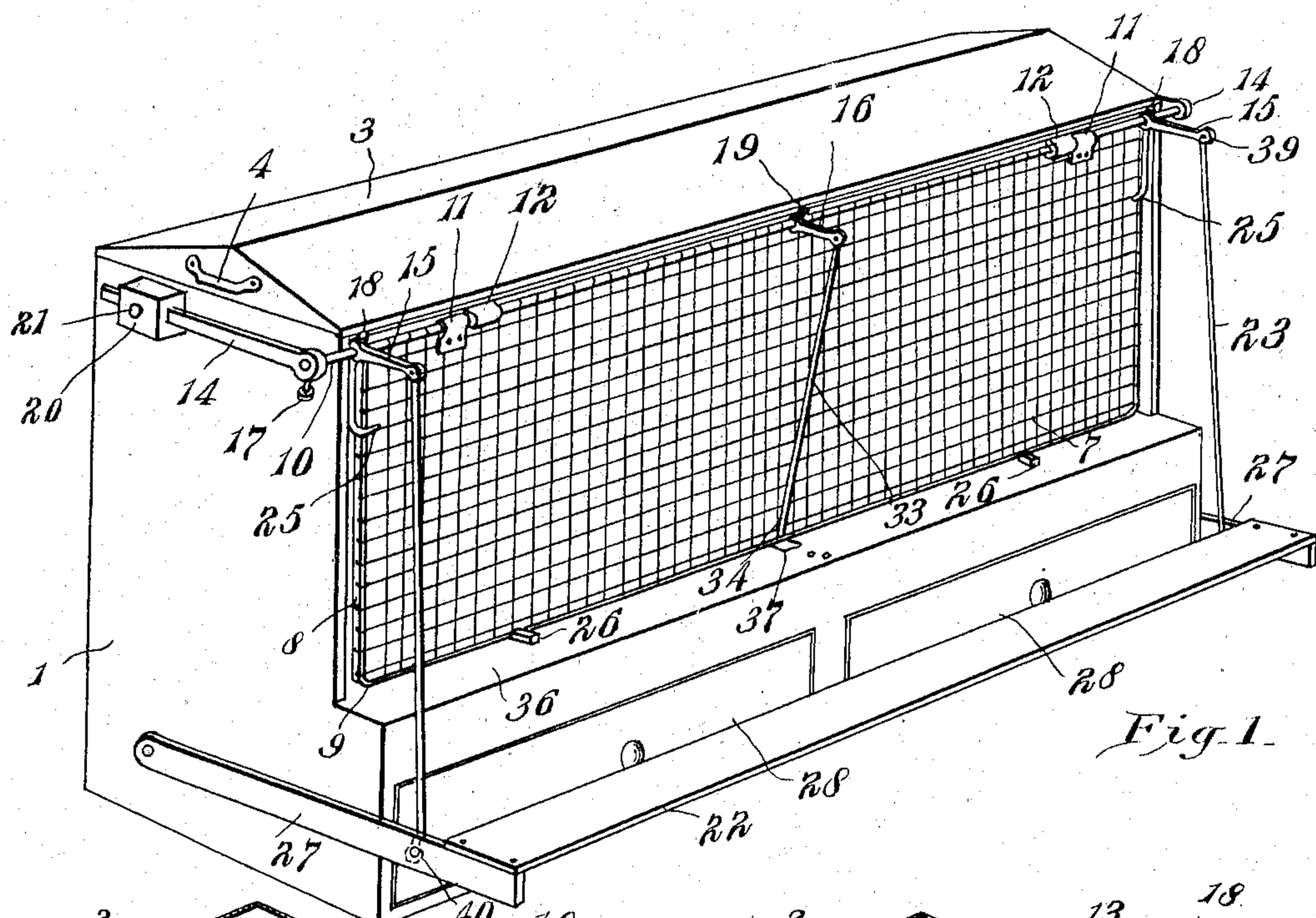


Fig. 1.

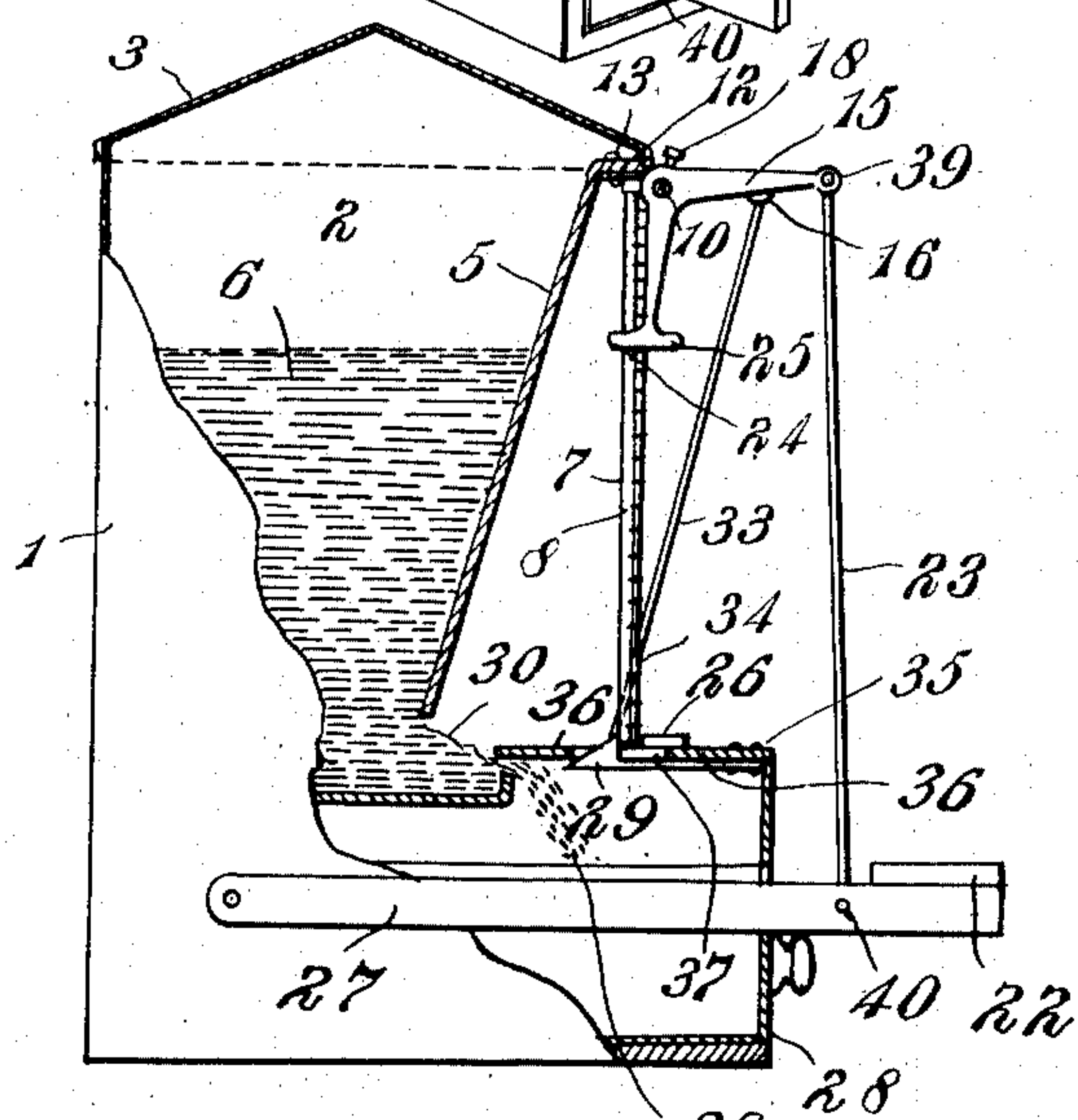


Fig. 2.

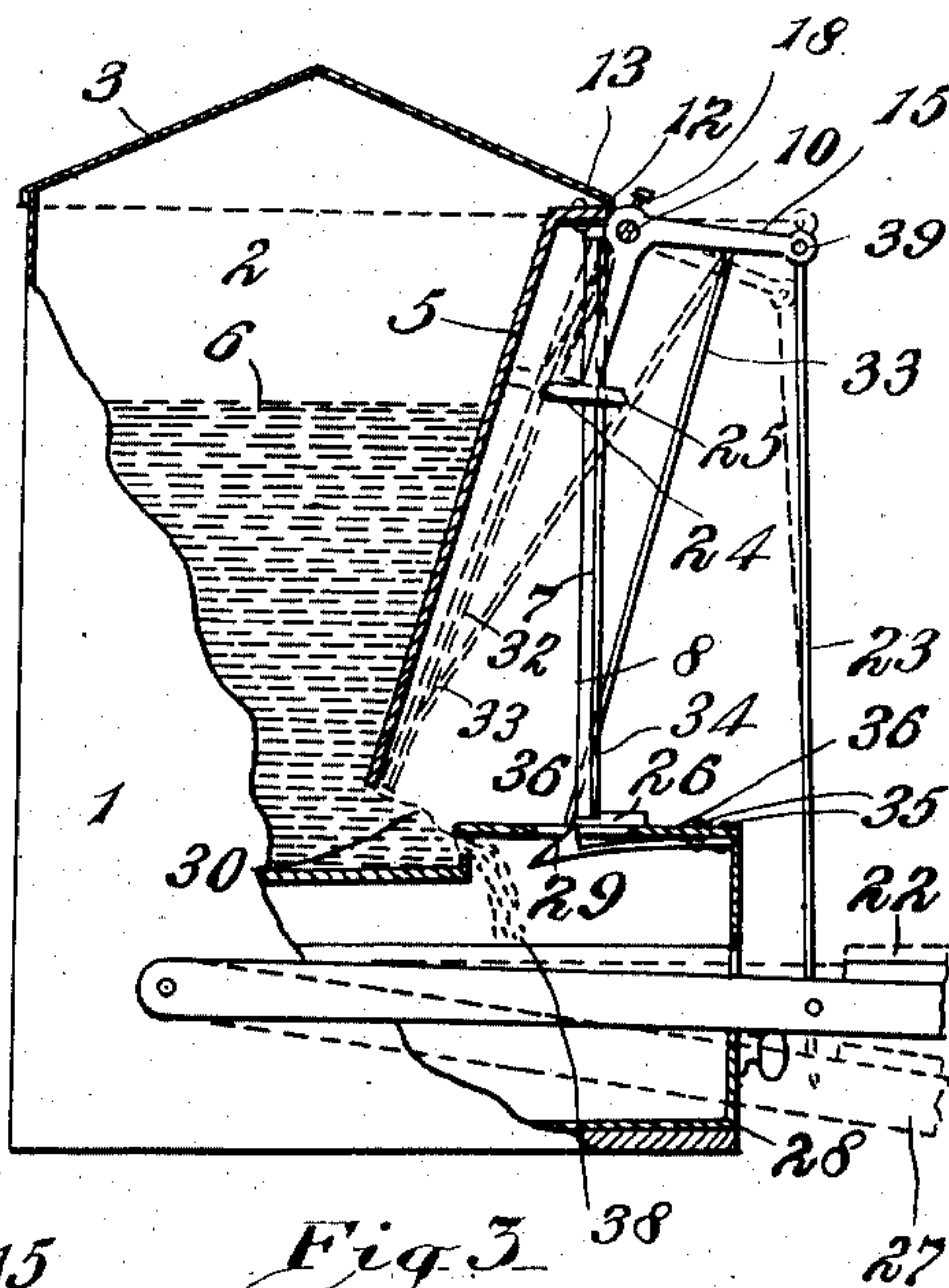


Fig. 3.

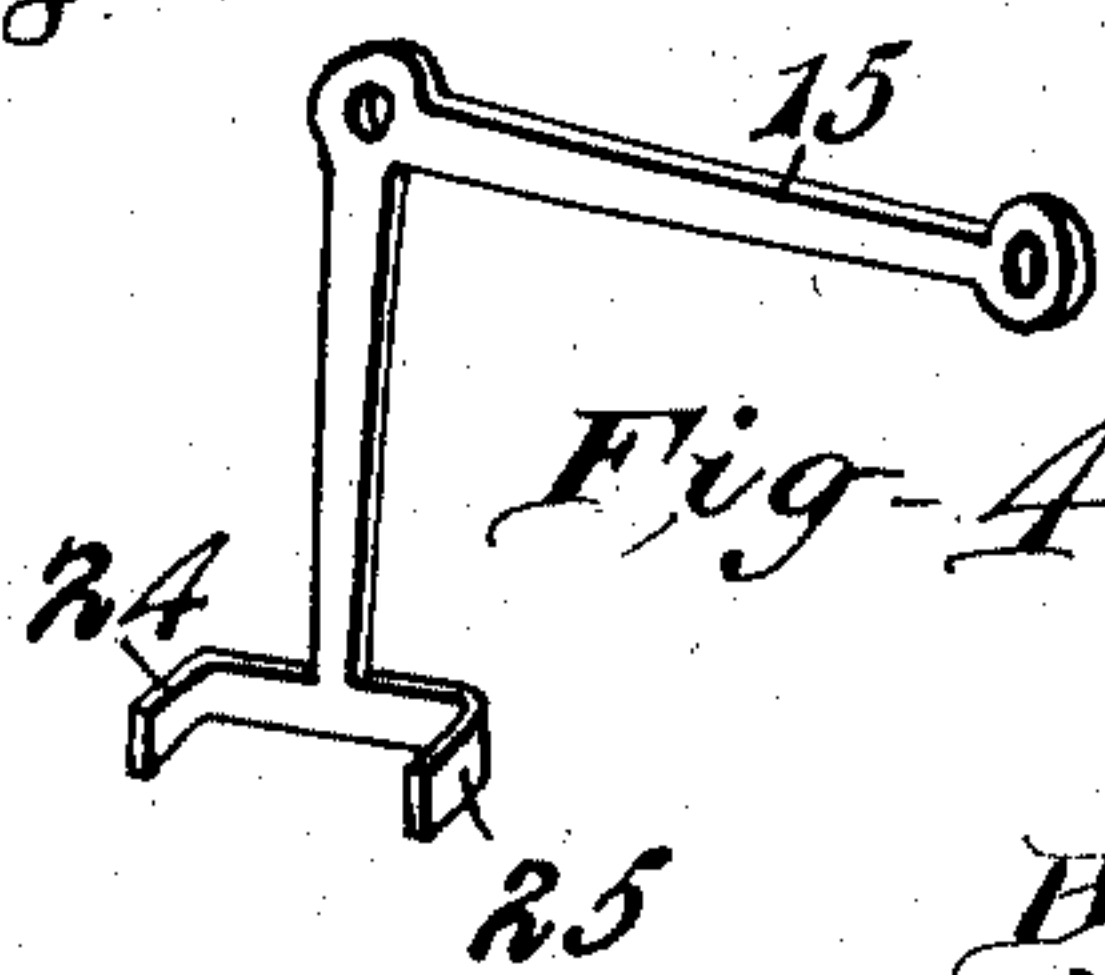


Fig. 4.

Witnesses:
W. C. Smith
A. A. Olson

Inventor:
George L. Poh,
By Joshua R. H. Potts,
Attorney

UNITED STATES PATENT OFFICE.

GEORGE L. POH, OF CHICAGO, ILLINOIS.

AUTOMATIC FEEDER.

No. 928,400.

Specification of Letters Patent.

Patented July 20, 1909.

Application filed August 3, 1908. Serial No. 446,787.

To all whom it may concern:

Be it known that I, GEORGE L. POH, a citizen of the United States, residing at Chicago, county of Cook, and State of Illinois, have invented certain new and useful Improvements in Automatic Feeders, of which the following is a specification.

My invention relates to improvements in devices for feeding chickens or other poultry, the object being to provide an automatic operative means in a device of this character.

A further object is to provide a simple and inexpensive construction in an automatic feeder and means for securely locking the same when not in use.

Other objects will appear hereinafter.

With these objects in view, my invention consists in a feed receptacle or hopper in combination with a swinging door arranged to be unlocked and opened inwardly by means of the weight of chickens on a platform connected with said door, and to be closed and locked by adjustable weights on levers also connected with said door.

My invention further consists in certain details of construction and arrangements of parts all as will be hereinafter fully described and particularly pointed out in the claims.

My invention will be more readily understood by reference to the accompanying drawings forming a part of this specification, and in which,

Figure 1 is a perspective view of the automatic feeder in its preferred form, Fig. 2 is an end view of the feeder showing a portion of the same broken away, a vertical section of a drawer, and a central vertical transverse section of a portion of the hopper and body portion showing the swinging door locked, Fig. 3 is a similar view showing the door unlocked, and Fig. 4 is a perspective view of one of the door operating levers.

Referring now to the drawings, 1 indicates the body portion, and 2 the hopper of the automatic feeder. A cover 3 is provided with a handle 4 at each end thereof. The front portion 5 of the hopper 2 is secured at each end of the body portion 1 and is inclined, as shown, in order to properly guide the feed 6. The swinging door 7 comprises a wire mesh and a wood backing 8. The wire mesh is rigidly secured to a wire edge 9 and is pivotally mounted on the hinge rod 10 by lacing about the same. The hinge members 11 are riveted to the door 7, and

the wood backing 8 is secured to the wire mesh in any suitable manner.

The body portion 1 and the hopper 2 are preferably of sheet metal, and the upper edge of the portion 5 of the hopper 2 is bent forwardly to receive hinge members 12 which are secured thereto by means of rivets 13. The door 7 is free to swing on the hinge rod 10 which passes through the hinge members 12, but the levers 14, 15 and 16 are rigidly secured to said rod by means of set-screws 17, 18 and 19, respectively. The levers 14 are provided with weights 20 which may be adjusted and secured thereon by means of the set-screws 21, this arrangement being the same at each end of the feeder. The weights 20 are adjusted on the levers 14 in such a manner as to overbalance the weight of the platform 22 which is connected to the bell crank levers 15 by means of connecting rods 23. The bell crank levers 15 are provided with forks having members 24 and 25 adapted to embrace the edges of the door 7. As the distance between the members 24 and 25 is greater than the thickness of the door 7, a limited movement of the latter is permitted between the members 24 and 25. Stops 26 are provided to limit the outward movement of the door 7. The platform 22 is connected to the body portion 1 by means of the pivotal arms 27. Drawers 28 are provided to receive the overflow of feed as shown.

The operation of the device is as follows: The platform 22 is normally in the raised position as shown in Figs. 1 and 2 since the weight of the weights 20 causes the levers 14 to be depressed and the horizontal portions of the bell crank levers 15 to be raised. The door 7 is normally closed and locked since the members 24 of the bell crank levers 15 press the door 7 outwardly against the stops 26, the spring catch 29 automatically engaging the lower edge of the door 7 as shown. In order that the door 7 may be opened to provide access to the feed at 30, the platform 22 must be depressed, and when the same is depressed as shown in Fig. 3, a rod 33 automatically depresses the catch 29 thus unlocking the door 7. And when the platform 22 is further depressed, the door 7 swings inwardly in the position indicated by dotted lines 32. The rod 33 passes through a perforation in the door 7 at 34 and is pivoted to the lever 16, the latter being depressed simultaneously with the platform 22. During the

initial downward movement of the platform 22 the door 7 is unlocked without being moved because of the clearance between the members 24 and 25, but when the member 25 5 contacts with the door 7, the latter begins to open. The catch 29 is secured by means of the rivets 35 to the horizontal portion 36 of the body portion, and projects through the slot 37 provided in the latter. Overflow 10 feed is shown at 38. And 39 and 40 are pivots at the upper and lower extremities of the connecting rods 23, respectively.

Having described my invention what I claim as new, and desire to secure by Letters 15 Patent, is:

1. In a device of the class described, in combination with a hopper, a body portion adapted to receive and form a part of said hopper, a cover provided with handles 20 adapted to fit over said hopper, a platform provided with arms pivoted to said body portion, said platform being arranged parallel with said body portion, a door, a hinge rod rotatably mounted in said 25 hopper and in said door, said door being adapted to swing on said hinge rod, bell crank levers rigidly secured to said hinge rod, forks in said levers adapted to engage said door, suitable locking and un- 30 locking means for said door, and connecting rods pivoted to said arms and said levers, substantially as described.

2. In a device of the class described, in combination, a body portion and a hopper 35 therein, a cover adapted to close said hopper, a horizontal portion in said body portion, said horizontal portion extending inwardly and provided with a central slot and with stops arranged thereon, a platform provided with 40 arms pivoted to said body portion, a door, a hinge rod rotatably mounted in said hopper and in said door, bell crank levers and weight levers rigidly secured to said hinge

rod, adjustable weights mounted on said weight levers, forks adapted to embrace said 45 door provided on said bell crank levers, a central lever rigidly secured to said hinge rod, connecting rods between said bell crank levers and said arms, said forks permitting said door and said bell crank levers to move 50 independently, a suitable locking device for said door and unlocking means for the same connected to said central lever, substantially as described.

3. In a device of the class described, a 55 body and a hopper therein, the bottom of said hopper being provided with an upwardly extending flange, drawers suitably arranged to receive feed which may flow over said flange, a horizontal portion in said 60 body extending in proximity to said flange and provided with a central slot and a spring catch adapted to project through said slot; a platform provided with arms pivotally 65 mounted on said body, a door, a hinge rod rotatably mounted in said hopper and in said door, weight levers and forked bell crank levers secured to said hinge rod by means of set-screws, said door being adapted to move 70 between the members of the forks of said bell crank levers, connecting rods pivoted to horizontal portions of said bell crank levers and to said arms, a central outwardly extending lever rigidly secured to said hinge 75 rod, a rod pivoted to said lever, said rod being adapted to extend downwardly and through a perforation in said door and to contact with said spring catch, substantially as described.

In testimony whereof I have signed my 80 name to this specification in the presence of two subscribing witnesses.

GEORGE L. POH.

Witnesses:

JANET E. HOGAN,
HELEN F. LILLIS.